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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,270	02/17/2004	Benedict A. Itri	59028-8002.US01	2044
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PERKINS COIE LLP P.O. BOX 2168 MENLO PARK, CA 94026			EXAMINER DEPPE, BETSY LEE	
			ART UNIT 2611	PAPER NUMBER
			MAIL DATE 12/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/781,270

Applicant(s)

ITRI, BENEDICT A.

Examiner

Betsy L. Deppe

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,8,9,12-16 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5,12 and 22-24 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,8,9,16 and 18 is/are rejected.
- 7) ☒ Claim(s) 13-15 and 19-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/17/04 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed October 9, 2007 have been fully considered but they are not persuasive with regard to independent claims 1 and 16. The argument with regard to independent claim 5 is persuasive and the rejection of July 9, 2007 is withdrawn.
2. In response to applicant's arguments that Benayoun does not teach or suggest determining the transmission rate associated with the first clock, as recited in claim 1 (see page 15), it is implicit/inherent that Benayoun determines the transmission rate associated with the first clock since the circuit is directed to synchronization of a first data terminal's clock signal to a second data terminal's clock signal using a network clock. (See column 1, lines 6-11) Furthermore, the resultant phase adjusted reference clock corresponds to the transmission rate of the first clock since the frequency of the reference clock is equal to the frequency of the transmitted clock. (See column 5, lines 9-11 and 18-22)
3. In response to applicant's arguments that Benayoun does not disclose "re-generating the master clock signal based on the phase relation and the network link clock signal," as recited in claim 16 (see page 16), it is implicit/inherent that the clock signal output of VCO 231 corresponds to a "re-generated master clock signal" (i.e. the

clock of codec B) since the clock frequency is equal to that of video codec B (see column 5, lines 8-10) and the phase of the frequency-divided signal is adjusted based on the phase difference transmitted by codec B (see column 5, lines 13-22).

Drawings

4. The drawings are objected to because:

a. in Figures 3 and 4, " R_T and R_N " are inconsistent with the corresponding detailed description (for example, see "RT" and "RN" on page 6). Either the specification must be amended or corrected drawing sheets in compliance with 37 CFR 1.121(d). Although the applicant indicated in the response filed October 9, 2007 that the detailed description was amended to be consistent with the corresponding detailed description, this amendment was not made since the detailed description does not use a subscript when referring to the respective clock signals and Figures 3 and 4 label the clock signals using subscripts.

b. Figure 5 should clearly show the modulus control circuit 158 providing a control signal to divider 150 (see page 7, lines 24-26). Currently, Figure 5 shows divider 152 as providing a signal to divider 150. Although the modulus control circuit 158 can control divider 150 via divider 152 (as argued by the applicant in the response), it is unclear from Figure 5 whether modulus control 158 affects divider 150 since Figure 5 merely shows a signal from divider 152 to divider 150. This objection may be overcome by drawing a line from modulus control 158 to divider 150.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The amendment filed October 9, 2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "sending downstream data at a rate specified by the network link clock signal RN" on page 6, lines 25-26. Furthermore, if the data is transmitted at a rate specified by the network

link clock signal RN, then the receiver circuitry for clock recovery in Figure 7 is not necessary since the RN is directly provided to the receiver (see Figure 4).

Applicant is required to cancel the new matter in the reply to this Office Action.

6. The disclosure is objected to because of the following informalities: on page 9, line 19, it appears that "network link clock RN" should be "master clock signal RT" since RN is provided to the receiver and the circuit in Figure 7 is used to recover RT using the phase offset from the transmitter. Appropriate correction is required.

Claim Objections

7. The claims are objected to because of the following informalities:

- a. in claim 9, line 2, "said network link clock is further operable" should be "a transmitter is operable" since a signal (i.e. the "network link clock") cannot transmit data;
- b. in claim 13, line 14, "received timing data" should be "recovered timing data" (see line 3);
- c. in claim 13, line 16, "receiver circuitry" should be "receiver circuit" (see line 1);
- d. in claim 14, line 2, insert "a" before the two occurrences of "circuit"; and
- e. in claim 18, line 5, "said" should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claim 8 recites the limitation "said transmitter module" in line 2. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 9 recites the limitation "said quantized bit" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

12. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

13. Claims 1, 2, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Benayoun et al. (US Patent No. 5,790,608 cited in the Office Action mailed 10/9/07).

14. With regard to claim 1, Benayoun et al. discloses the claimed invention including a transmitter module at the first location (codec B) comprising a phase detector (281) to generate one or more data bits between a first clock signal associated with the transmission rate and a second clock signal associated with a network link rate (see column 4, lines 36-40); a receiver module at the second location (codec A) and coupled

to the transmitter via a network; wherein the transmitter transmits the data stream and the bits indicating the phase offset (see column 4, lines 51-60); wherein the receiver determines the transmission rate associated with the first clock based on the one or more data bits indicating phase offset (see column 4, line 66 - column 5, line 22). (See also Figures 1, 3A and 3B; column 1, lines 55-65; and column 4, lines 1-17)

15. With regard to claim 2, Benayoun et al. discloses the claimed invention including the first and second clocks having a predefined relation and the phase device generating signals from the first and second clocks wherein these signals have a nominal frequency rate. (See column 4, lines 44-51)

16. With regard to claim 16, Benayoun et al. discloses claimed invention including providing a master clock signal (e.g. clock B) and network link clock (i.e. "reference clock"); determining a phase relation between the master clock and network link clock (i.e. phase comparator 281 and see column 4, lines 48-51); and re-generating the master clock signal based on the phase relation and network link clock signal (see column 5, lines 9-22).

Claim Rejections - 35 USC § 103

17. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

18. Claims 4 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benayoun et al., as applied to claims 1 and 16, respectively, above, and further in view of Itri (US Patent No. 5,864,592 cited in the Office Action mailed 10/9/07).

19. With regard to claim 4, Benayoun et al. discloses the claimed invention except for transmitting the phase error signal in an overhead channel. Itri ('592) discloses transmitting phase error signals in an overhead channel. (See column 6, lines 14-21) It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Itri ('592) with Benayoun et al. in order to maximize data transmission in Benayoun et al. by using a separate channel for the phase error information.

20. With regard to claim 18, Benayoun et al. discloses the claimed invention including quantizing the phase relation. (See "digitizes" in column 4, lines 51-55) However, Benayoun et al. does not disclose transmitting the quantized phase relation via an overhead channel. Itri ('592) discloses transmitting phase error signals in an overhead channel. (See column 6, lines 14-21) It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Itri ('592) with Benayoun et al. in order to maximize data transmission in Benayoun et al. by using a separate channel for the phase error information.

Allowable Subject Matter

21. Claims 5, 12-15 and 22-24 are allowable.

22. Claims 8 and 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

23. Claims 19-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betsy L. Deppe whose telephone number is (571) 272-3054. The examiner can normally be reached on Monday, Tuesday and Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Betsy L. Deppe
Primary Examiner
Art Unit 2611